

The Development of the Freezing and Export of Prawns in India*

The preservation of food for a needy day and its transport to places of scarcity have been engaging the attention of man from olden days. The time-honoured methods for preserving sea food were drying, pickling, smoking and lately canning. Freezing of fish as a large commercial proposition was adopted in the western countries early this century and became popular especially in the United States after the first world war. Preservation by quick freezing has the inimitable advantage in that the article so preserved retains its original appearance, texture, flavour and quality, which the other methods were unable to ensure. Fresh fish after being cleaned is subjected to a temperature as low as -40°F and when it is frozen hard is packed and stored in chambers maintaining a temperature of 0°F . The frozen fish is transported in refrigerated chambers of trucks or steamers to distant places for sale and consumption.

Until a few years ago the surplus catches of fish, prawns, etc. were being dried, salted or pickled. The Kerala coast had always yielded large catches of prawns and about 5000 tons of dried prawns were annually exported to Burma and other Eastern countries.

The quick-freezing of seafood was introduced in India only very recently. A small pilot plant with a capacity to freeze one and a half tons of prawns per day and to store fifty tons of frozen fish was set up for the first time in 1951 in Cochin. Although sample consignments of frozen prawns were produced in this factory and sent to the United States, commercial production for export was not started until 1953. The pioneers in the field, Messrs. Cochin Compony, Ernakulam, exported a small quantity of 29,000 lbs. of frozen prawns to the United States during that year.

Despite the initial reaction in the minds of the Americans to the purchase and consumption of sea food from far off India, the Indian prawn soon came to be appreciated for its quality and flavour, and the imports from India registered a rapid increase.

The infant industry of freezing and export of prawns in India was at that time beset with a multitude of growing pains. The catches of prawns were spread throughout the coast line and there was neither transport nor ice to bring them to the factory at Cochin. In the absence of electricity, the refrigeration machinery had to be run on diesel engines. The workers employed in the factory were unfamiliar with the technique of processing and packing. Suitable packing material was unavailable in India. Steamers

* Contributed.

with frozen-food storage chambers were few and far between. However, slowly but steadily, the industry took measures to overcome those difficulties, and fighting against odds, continued to expand and develop.

In 1954 the processing and packing technique in the factory was improved and elaborated. Whereas in the previous year prawns were frozen and exported only in a headless fashion, new varieties were soon introduced, like the completely peeled and deveined prawn meat, the cooked prawn meat, the fan-tailed butterfly prawn etc. The machinery in the plant was also modernised by introducing for the first time in India the contact plate freezers. A flake-ice plant supplemented the ice purchased from the market. Attractively printed waxed cartons and cases were imported from abroad, and the business rapidly forged ahead. From the small beginning of 29,000 lbs. of frozen prawns exported to U.S.A. in 1953, the exports of Cochin Company rose to half a million pounds in 1956. The frozen prawn of India was thus introduced and popularised by them in the United States, in various countries of Europe and in Australia, and those countries are continuing to absorb more and more of the Indian production, thereby contributing in considerable measure to the foreign exchange earnings of our country.

The next concern to undertake the freezing of prawns for export from India was the Malabar Ice and Cold Storage Company, a partnership of Indian and American interests. They leased the Government of Madras Cold Storage Plant in Calicut and commenced freezing and export operations in 1955. Ice was plentifully available in this plant and there were large catches of prawns in and near Calicut in certain months of the year. There were however difficulties in making shipments because steamers could not come alongside the Calicut wharf and the frozen cargoes had to be taken three miles out to sea for loading into the refrigerated holds of steamers. The Malabar Ice & Cold Storage Co. were able to export sizeable quantities of frozen prawns from Calicut in 1956 to 1958 when they ceased operations.

The Southern Fisheries Corporation, Cochin, was the second concern in India which established its own plant for the freezing and export of prawns. They started production and exports in 1956.

In the following year M/s. International Fisheries Pvt. Ltd., Bombay, set up a plant at Cochin and soon after came the Factories of M/s. Indo-Marine Agencies, Cochin, and M/s. India Seafoods (Regd), Cochin. With the combined efforts of all these business houses, the export of frozen seafood increased rapidly.

In the space of seven years, the complexion of the industry had undergone a radical change. From very modest beginnings, the industry had suddenly developed into one employing a very large number of workers directly and indirectly and earning considerable sums of foreign exchange for the country. The export of 29,250 lbs. in 1953 rose in 1962 to a figure of five million pounds.

The industry has never looked back afterwards. Government plants were opened to the public in Bombay, Mangalore, Trivandrum and Cochin. Enthusiastic businessmen took advantage of this and having hired freezing and storage facilities in those

plants entered the export industry. In 1964 there are thirty firms engaged in the freezing and export of prawns not only to the United States but to various countries in Europe, to Japan, to Australia, and to the Middle East.

The industry started, and continued for some time, by depending for its raw material upon catches brought in by fishermen all along the coast. As the business progressed and more and more plants were set up, it was found that the catches made by the fishermen were inadequate to feed all the plants, and thereupon the factories proceeded to build and employ for trawling for prawns fleets of mechanised vessels. Encouraged by the results obtained by these pioneering vessels, a large number of mechanised fishing trawlers have now been put into operation all over Kerala. The development of the prawn-freezing and canning industry has thus led to the establishment of mechanised fishing in India.

The phenomenal growth of the industry was not without encountering and in many cases overcoming great difficulties. The machinery for freezing and cold storage had to be speedily modernised and the factories erected in later years, like those belonging to the Island Seafoods, International Fisheries, New India Fisheries and Kerala Food Packers, employ upto-date machinery and are planned on modern lines. Mechanical graders and washers and other time-saving devices have been put into commission. Ice plants of varying capacities have sprung all over the coastal belt and the total capacity of ice production in Kerala now is about 350 tons per day.

It has also to be mentioned that in certain cases it was difficult to maintain a very high standard of quality in production which is demanded by the consuming markets in the west for this valuable and expensive item of frozen food. A system of quality control based on standards laid down by the Indian Standards Institute has now been voluntarily adopted by the industry.

The Government of India realising the great potential of this industry for earning foreign exchange has now, with a view to encourage exports, provided a series of incentives towards this end. Certain items which are indispensable for fishing, processing and packing, have been allowed to be freely imported by the exporters depending upon their export performance. The Government are also keen to help the industry overcome their difficulties and have set up a statutory body, the Marine Products Export Promotion Council, to assist the industry to export more and more.

It has to be mentioned that the quick freezing of prawns today in India is wholly export oriented. Almost the entire production of all the factories is sold abroad. The time will shortly come when the industry will have to produce goods for sale in India as well. That will be the next stage in the growth and development of the frozen fish industry in our country.

EXPORT OF FROZEN PRAWNS FROM INDIA

<i>Year</i>	<i>Quantity</i>	<i>Value</i> Rs.
1953	29,250 lbs.	57,740
1954	1,33,600 lbs.	2,72,893
1955	1,06,150 lbs.	2,94,002
1956	4,19,300 lbs.	10,96,716
1957	4,86,410 kgs.	21,33,546
1958	7,79,526 kgs.	37,90,200
1959	10,49,527 kgs.	49,23,203
1960	12,11,165 kgs.	58,66,123
1961	14,62,656 kgs.	73,66,872
1962	22,38,190 kgs.	1,08,20,276
1963	39,66,899 kgs.	2,12,03,766

FIRMS ENGAGED IN THE FREEZING AND EXPORT OF PRAWNS FROM THEIR OWN FACTORIES

1. M/s Cochin Company Private Limited, Ernakulam
2. M/s Southern Fisheries Corporation, Cochin
3. M/s International Fisheries Limited, Bombay
4. M/s Indo-Marine Agencies, Cochin
5. M/s India Sea Foods (Regd), Cochin
6. M/s Marino Fisheries, Ernakulam
7. M/s Castlerock Fisheries, Cochin
8. M/s New India Fisheries Limited, Cochin
9. M/s Island Seafoods, Private Limited, Cochin
10. M/s Avaran & Sons, Calicut
11. M/s Kerala Food Packers, Alleppey

**FIRMS ENGAGED IN THE FREEZING AND EXPORT OF PRAWNS
FROM GOVERNMENT COLD STORAGE PLANTS**

1. M/s Arabian Seafoods, Cochin.
2. M/s Associated Fisheries, Chengannur.
3. M/s Calicut Food Packers, Calicut.
4. M/s Delta Frozen Foods, Trivandrum.
5. M/s Four Seasons Fisheries Co., Gulzar Bagh, Jeppoo.
Mangalore—1 (Mysore State).
6. M/s Fishermen Sales Organisation, Neendakara, Quilon.
7. M/s Feroke Frozen Foods, Kuttikulam.
8. M/s George Maijo & Co., Cochin.
9. M/s G. R. Kassamali, Bombay.
10. M/s John & Co., Neendakara, Quilon.
11. M/s Kurwath Damodaran, Ernakulam.
12. M/s Karnataka Fisheries Corporation, Mangalore.
13. M/s Kaivarthaka Industrial Works, Mangalore.
14. M/s Malabar Pack Marines, Calicut.
15. M/s Narayandas Devarkardas & Sons, Calicut—1.
16. M/s Oceanic Products Exporting Co., Quilon.
17. M/s Philo Sea Food Exporters, Quilon.
18. M/s Thykoodan Commercial House, Cochin.
19. M/s Travancore-Cochin Prawn Curers and Marketing
Co-operative Society, Cochin.